

N.B. *Stella illa Telescopica a qua die Januarii 25° Lunam precessit, Ascensionem rectam tunc habuit $81^{\circ} 28' \frac{1}{2}$, & distabat a Polo $66^{\circ} 58' 10''$, unde fit Longitudo ejus $\pi 22^{\circ} 9' \frac{2}{3}$ cum Latitudine Australi $0^{\circ} 13' \frac{1}{2}$. Hæc autem est ea ipsa stella ad quam applicabatur Jupiter in Statione secunda, anno 1634 Februarii 6, eamque non nisi tribus sui corporis diametris ad Austrum reliquit, observante Gassendo: ut habetur inter Observata ejus pag 174. Et ad eandem Mars observatus est Septembris 6to anno 1644 mane, ut videre est in Prolegomenis Selenographiæ Hevelianæ pag. 65 & Fig. 1. Verum multum usui erit, ad accuratam Nodi Jovis determinationem, ejusque motus, si modo inter stellas fixas planum orbita Jovialis non hereat immobile. Etenim post decursum 83 annorum, quibus Jupiter satis accurate septem absolvit periodos, anno scil. 1717. Januarii 10. mane, Planeta stellam illam corporaliter teget vel saltem stringet, spectaculo quidem raro neque hætenus quod sciam Astronomis in Jove concessio.*

Stella autem ipsa, etiamsi Telescopica vocetur, sudo cælo & absente Lunâ inermis oculi aciem non fugit; comitemque habet sequentem ad Austrum, & semidiametro Solis circiter distantem, apud quam conspicietur Jupiter arctissime conjunctus, Die vicesimo Julii anni proximi 1716 mane.

IV. *An Account of an Experiment made by Dr. Brook Taylor assisted by Mr. Hawkesbee, in order to discover the Law of the Magnetical Attraction.*

BY Order of the Royal Society Mr. *Hawkesbee* and my self made an Experiment with the great Loadstone belonging to the Royal Society, in order to discover the Law of the Magnetical Attraction; and not long
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after I gave an account of it to the Society in a Letter to Dr. *Sloane*, (who was then Secretary) dated *June 25. 1712.* Since that, Mr. *Hawkesbee* made another Experiment of the same nature with a smaller Loadstone; which he has given an account of in the *Philosophical Transactions* No. 335. But upon comparing the Numbers of that Experiment with those of the other, I find the Numbers of the first Experiment to be very much more regular. Wherefore I conclude that to be the best Experiment, and since no notice has been taken of the Account I gave of it, and I have reason to believe Mr. *Hawkesbee* lost the Table I left with him for the Society, of the Numbers relating to it, I take this occasion to present the Society with the following Account of it.

We placed the great Loadstone belonging to the Royal Society so, that it's two Poles lay in the Plane of the Horizon, and were in a Line exactly at right Angles with the natural Direction of the Needle we made use of, (which was that Dr. *Halley* had made to observe the Variations with). And by means of a Carriage contrived for that purpose, the Stone was easily moved to and fro, the Poles continuing always in the same Line. The Needle was so placed, that the Center it play'd upon was in the same Line with the Poles of the Stone; the North Pole being towards the Needle. We measured the Distances from the Center of the Needle to the Extremity of the Stone; and we found the Variations of the Needle from its natural Position to be as in the following Table.

Distant. Feet	Variat.	Distant. Feet	Variat.	Distant. Feet	Variat.
1	81 45	4	16 0	7	3 30
2	58 00	5	9 20	8	2 20
3	30 00	6	5 35	9	1 35
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